

FISH &amp; RICHARDSON P.C.

PTO/SB/106 (8-96)  
 Approved for use through 9/30/98. OMB 0651-0032  
 Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# Declaration and Power of Attorney For Patent Application

特許出願宣言書及び委任状

## Japanese Language Declaration

日本語宣言書

以下の氏名の発明者として、私は以下の通り宣言します。

As a below named inventor, I hereby declare that:

私の住所、郵便箱、国籍は下記の私の氏名の後に記載された通りです。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明に関して請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

SEMICONDUCTOR DEVICE AND MANUFACTURING  
METHOD THEREOF

上記発明の明細書（下記の欄でx印がついていない場合は、本書に添付）は、

the specification of which is attached hereto unless the following box is checked:

☐ 月 日に提出され、米国出願番号または特許協定条約  
 国際出願番号を \_\_\_\_\_ とし、  
 （該当する場合） \_\_\_\_\_ に訂正されました。

☒ was filed on December 22, 1997  
 as United States Application Number or  
 PCT International Application Number  
08/996,357 and was amended on  
 \_\_\_\_\_ (if applicable).

私は、特許請求範囲を含む上記訂正後の明細書を検討し、内容を理解していることをここに表明します。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編第1章56項に定義されるとおり、特許資格の有無について重要な情報を開示する義務があることを認めます。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## Japanese Language Declaration

(日本語宣言書)

私は、米国法典第35編119条(a)-(d)項又は365条(b)項に基づき下記の、米国外の国の少なくとも一ヶ国を指定している特許協力条約365(a)項に基づく国際出願、又は外国での特許出願もしくは発明者証の出願についての外国優先権をここに主張するとともに、優先権を主張している、本出願の前に出願された特許または発明者証の外国出願を以下に、枠内をマークすることで、示しています。

## Prior Foreign Application(s)

外国での先行出願  
8-358956(Number)  
(番号)

Japan

(Country)  
(国名)

December 30, 1996

(Day/Month/Year Filed)  
(出願年月日)

## Priority Not Claimed

優先権主張なし

☐(Number)  
(番号)(Country)  
(国名)(Day/Month/Year Filed)  
(出願年月日)☐

私は、第35編米国法典119条(e)項に基づいて下記の米国外特許出願規定に記載された権利をここに主張いたします。

(Application No.)  
(出願番号)(Filing Date)  
(出願日)(Application No.)  
(出願番号)(Filing Date)  
(出願日)

私は、下記の米国法典第35編120条に基づいて下記の米国外特許出願に記載された権利、又は米国を指定している特許協力条約365条(c)項に基づき権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第35編112条第1項又は特許協力条約で規定された方法で先行する米国外特許出願に開示されていない限り、その先行米国外出願書提出日以降で本出願書の日本国内または特許協力条約国際提出日までの期間中に入手された、連邦規則法典第37編1条5.6項で定義された特許資格の有無に関する重要な情報について開示義務があることを認識しています。

(Application No.)  
(出願番号)(Filing Date)  
(出願日)(Status: Patented, Pending, Abandoned)  
(現況: 特許許可済、係属中、放棄済)(Application No.)  
(出願番号)(Filing Date)  
(出願日)(Status: Patented, Pending, Abandoned)  
(現況: 特許許可済、係属中、放棄済)

私は、私自身の知識に基づいて本宣言書で私が行なう表明が真実であり、かつ私の入手した情報と私の信じていることに基づき表明が全て真実であると信じていること、さらに故意になされた虚偽の表明及びそれと同等の行為は米国法典第18編第1001条に基づき、罰金または拘禁、もしくはその両方により処罰されること、そしてそのような故意による虚偽の声明を行えば、出願した、又は既に許可された特許の有効性が失われることを認識し、よってここに上記のごとく宣誓を致します。

I hereby claim foreign priority under Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## Japanese Language Declaration

(日本語宣言書)

特許法 第2条第1項第2号の発明者として、本出願に関する一切の権利を本特許事務所に対して行使する権利はわたしにあり、わたしは、この特許事務所を指名いたします。(発明者、または発明者の名称及び住所を記載のこと)

Scott C. Harris Reg. No. 32,030

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number)

特許代理人  
 Scott C. Harris  
 FISH & RICHARDSON  
 4225 Executive Square, Ste. 1400  
 La Jolla, CA 92037

Send Correspondence to:

直接電話連絡先: (名前及び電話番号)  
 Scott C. Harris  
 (619) 678-5070

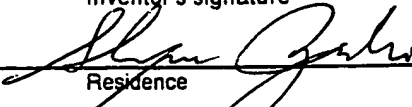
Direct Telephone Calls to: (name and telephone number)

唯一または第一発明者		Full name of sole or first inventor	
		Jun KOYAMA	
発明者の署名	日付	Inventor's signature	Date
		<i>Jun Koyama</i>	June 2, 1998
住所		Residence	
		Kanagawa, Japan	
国籍		Citizenship	
		Japanese	
私書箱		Post Office Address	
		c/o SEMICONDUCTOR ENERGY LABORATORY CO., LTD. 398, Hase, Atsugi-shi, Kanagawa-ken 243-0036 Japan	
第二共同発明者		Full name of second joint inventor, if any	
		Hisashi OHTANI	
発明者の署名	日付	Inventor's signature	Date
		<i>Hisashi Ohtani</i>	June 1, 1998
住所		Residence	
		Kanagawa, Japan	
国籍		Citizenship	
		Japanese	
私書箱		Post Office Address	
		c/o SEMICONDUCTOR ENERGY LABORATORY CO., LTD. 398, Hase, Atsugi-shi, Kanagawa-ken 243-0036 Japan	

(第三以降の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for third and subsequent joint inventors.)

☒ Please see attached page 3a for names, addresses and signatures of additional inventors, if any.

第三共同発明者		Full name of third joint inventor, if any	
		Yasushi OGATA	
発明者の署名	日付	Inventor's signature	Date
		Yasushi Ogata	May 16, 1998
住所	Residence		
	Kanagawa, Japan		
国籍	Citizenship		
	Japanese		
私書箱	Post Office Address		
	c/o SEMICONDUCTOR ENERGY LABORATORY CO., LTD.		
	398, Hase, Atsugi-shi, Kanagawa-ken 243-0036		
	Japan		
第四共同発明者		Full name of fourth joint inventor, if any	
		Shunpei YAMAZAKI	
発明者の署名	日付	Inventor's signature	Date
			June 2, 1998
住所	Residence		
	Tokyo, Japan		
国籍	Citizenship		
	Japanese		
私書箱	Post Office Address		
	c/o SEMICONDUCTOR ENERGY LABORATORY CO., LTD.		
	398, Hase, Atsugi-shi, Kanagawa-ken 243-0036		
	Japan		
第五共同発明者		Full name of fifth joint inventor, if any	
発明者の署名		Inventor's signature	Date
住所	Residence		
国籍	Citizenship		
私書箱	Post Office Address		
第六共同発明者		Full name of sixth joint inventor, if any	
発明者の署名		Inventor's signature	Date
住所	Residence		
国籍	Citizenship		
私書箱	Post Office Address		



**COPY**  
UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SEPTEMBER 22, 1998

PTAS

FISH & RICHARDSON P.C.  
SCOTT C. HARRIS  
4225 EXECUTIVE SQUARE, SUITE 1400  
LA JOLLA, CA 92037



\*100765492A\*

RECEIVED

SEP 30 1998

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT FISH & RICHARDSON, P.C.  
LA JOLLA, CA

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION  
OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS  
AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER  
REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE  
INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA  
PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD  
FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY  
CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.  
PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE,  
ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY,  
SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/01/1998

REEL/FRAME: 9301/0784  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
KOYAMA, JUN

DOC DATE: 06/02/1998

ASSIGNOR:  
OHTANI, HISASHI

DOC DATE: 06/01/1998

ASSIGNOR:  
OGATA, YASUSHI

DOC DATE: 05/16/1998

ASSIGNOR:  
YAMAZAKI, SHUNPEI

DOC DATE: 06/02/1998

ASSIGNEE:  
SEMICONDUCTOR ENERGY LABORATORY  
CO., LTD.  
398, HASE, ATSUGI-SHI  
KANAGAWA-KEN 243-0036, JAPAN

SERIAL NUMBER: 08996357  
PATENT NUMBER:

FILING DATE: 12/22/1997

ISSUE DATE:	
Reviewed By:	
Initials:	

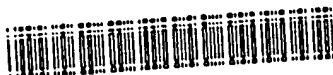
TARA WASHINGTON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

07-15-1998

U.S. Patent and Trademark Office  
R SH T

7-1-98

Assistant Commissioner for Patents



100765492

Document

1. Name of conveying party(ies):

Jun Koyama  
Hisashi Ohtani  
Yasushi Ogata  
Shunpei Yamazaki

2. Name and address of receiving party(ies):

Semiconductor Energy Laboratory Co., Ltd.  
398, Hase, Atsugi-shi  
Kanagawa-ken 243-0036 Japan

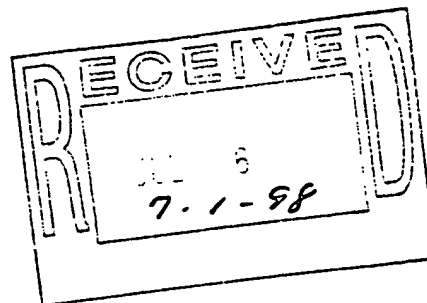
Additional name(s) attached? ☐ Yes ☐ No

Additional names/addresses attached? ☐ Yes ☐ No

3. Nature of conveyance:

- ☐ Assignment  
☐ Merger  
☐ Security Agreement  
☐ Change of Name  
☐ Other:

Execution Date: 6/1/98; 6/2/98 and 5/16/98  
respectively



4. Application number(s) or patent number(s):

If this document is being filed with a new application, the execution date of the application is:

A. Patent Application No.(s):  
08/996,357

B. Patent No.(s):

Additional numbers attached? ☐ Yes ☐ No

5. Name/address of party to whom correspondence concerning document should be mailed:

Scott C. Harris, Reg. No. 32,030  
Fish & Richardson P.C.  
4225 Executive Square, Suite 1400  
La Jolla, CA 92037

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR 3.41): \$40

- ☐ Enclosed  
☐ Authorized to charge deposit account

8. Deposit account number: 06-1050

If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.

DO NOT USE THIS SPACE

9. Statement and signature: To the best of my knowledge and belief, the foregoing information is true and correct and the attached is the original document.

Scott C. Harris, Reg. No. 32,030

Name of Person Signing

Signature

Date

7/1/98

Total number of pages including cover sheet, attachments, and document: 3

07/14/1998 DNGUYEN 00000212 00996357

01 FC:501

40.00 DP

\* Date of Deposit

7-1-98

I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Janet Christy  
Jcentchr

FISH & RICHARDSON P.C.

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby assign(s), transfer(s) and set(s) over to:

Semiconductor Energy Laboratory Co., Ltd.

having the address:

398, Hase, Atsugi-shi, Kanagawa-ken 243-0036 Japan

(hereinafter designated as the "ASSIGNEE"), its successors and assigns, the entire right, title, and interest for the United States in the invention, and all applications for patent and any Letters Patent which may be granted therefor, including said application, and all United States Letters Patents which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of said Letters Patent when granted to be held by said ASSIGNEE. its successors, assigns or their legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been and enjoyed by Assignor(s) if this assignment had not been made, the application being known by the Title:

SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF

Attorney Docket No: 07977/209001

for which the undersigned has/have executed an application for patent in the United States of America on the same day herewith. Where this instrument is not filed concurrently with the application, the following identifying information may be added after execution:

Serial No. 08/996,357

Filing Date: December 22, 1997

1. The undersigned hereby agree(s) to sign and execute any further documents and instruments which may be necessary, lawful and proper in the prosecution of said above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue application or in any amendments, extension or interference proceedings, or otherwise to secure the title thereto to the ASSIGNEE.

2. The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.



3. The undersigned agree to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the ASSIGNEE.

4. The undersigned hereby authorize(s) and request(s) the Commissioner of Patents in the United States to issue any and all Letters Patents resulting from said application or any division or divisions or continuing applications thereof to the said ASSIGNEE.

5. The undersigned hereby grant(s) to the firm of Fish & Richardson P.C. the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

June 2, 1998

Date

Jun Koyama  
Typed Name: Jun KOYAMA

June 1, 1998

Date

Hisashi Ohtani  
Typed Name: Hisashi OHTANI

May 16, 1998

Date

Yasushi Ogata  
Typed Name: Yasushi OGATA

June 2, 1998

Date

Shunpei Yamazaki  
Typed Name: Shunpei YAMAZAKI

                      
Date

                      
Typed Name:

                      
Date

                      
Typed Name:

                      
Date

                      
Typed Name: